July 6, 2017

***Submitted via regulations.gov***

Water Docket
U.S. Environmental Protection Agency
Washington, DC 20460
Attn: **Docket ID No. EPA-HQ-OW-2009-0819**

Re: Comments on Proposed Postponement Of Compliance Dates For Effluent Limitations Guidelines Covering Steam Electric Power Generating Point Sources, 82 Fed. Reg. 26,017 (June 6, 2017)

The Center for Biological Diversity (Center) submits these comments on Administrator Pruitt's Proposed "Delay Rule" to indefinitely delay compliance deadlines in the agency's 2015 Final Rule establishing Effluent Limitation Guidelines (ELGs) for Steam Electric Power Plants. 80 Fed. Reg. 67,838 (Nov. 3, 2015) (Final ELG Rule). The Center is a non-profit environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has more than 1.3 million members and online activists dedicated to the preservation of native wildlife and habitat.

As we explained in our attached comments on the Environmental Protection Agency's (EPA) 2013 Proposed ELG Rule, power plant water pollution impairs our nation's waters and threatens public health and wildlife, including endangered and threatened species. *See* Attachment 1. The Final ELG Rule, promulgated after years of painstaking work, is a significant step forward in regulating toxic wastewater streams of mercury, arsenic, lead, cadmium, and selenium, among other pollutants. Thus, the Final ELG Rule moves in the direction of lessening the environmental harms caused by these discharges, as mandated by the Clean Water Act (CWA).

As we detail below, for several reasons Administrator Pruitt may not finalize the Delay Rule and thereby put off the compliance deadlines for the Final ELG Rule. There is no legal basis for delaying the Final ELG Rule's implementation without *first* completing a lawful rulemaking to modify or otherwise change the Rule. Moreover, because the Delay Rule indefinitely delays concrete environmental improvements – thereby causing concrete environmental harm – EPA may not finalize the Delay Rule without *first* complying with the Endangered Species Act (ESA), 16 U.S.C. § 1531, *et seq*., and the National Environmental Policy Act (NEPA), 42 U.S.C. § 4321, *et seq.*. With respect to the ESA in particular, as we will explain, EPA must obtain one or

more Biological Opinions (Bi-Op) from the Fish and Wildlife Service (FWS) and/or NOAA Fisheries addressing whether the Delay Rule may jeopardize the continued existence of listed species or adversely modify critical habitat; the extent to which the Delay Rule will incidentally take listed species; and the specific measures EPA must carry out to minimize and mitigate those adverse effects. *See* 16 U.S.C. § 1536.[1]

## Background

### A. EPA's ELG Rule

EPA proposed the ELG Rule in June, 2013, explaining that steam electric power plants "contribute 50-60 percent of all toxic pollutant discharged into surface waters by all industrial categories," and that these level of pollution will only further increase "as pollutants are increasingly captured by air pollution controls and transferred to wastewater discharges." Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category, Proposed Rule, 78 Fed. Reg. 34,432 (2013) (Proposed ELG Rule). In our attached 2013 comments on the Proposed ELG Rule (hereby incorporated by reference), we detailed many of the harmful pollutants discharged from these power plants, and the concrete harms they are causing to the environment and wildlife. For example, we explained that mercury and selenium discharges are damaging a variety of wildlife species inhabiting a wide range of water-based ecosystems across the United States, as well as posing concrete risks to human health. We also documented the concrete steps that can be taken by power plants to minimize or eliminate these discharges and consequent environmental harms.
EPA's Environmental Assessment (EA) on the ELG Rule – prepared pursuant to NEPA – further detailed these harms. Thus, for example, the EA explained that many of these plants' discharges are having "lethal and sublethal impacts on fish, impacts on the diversity and size of populations in the ecosystem, and impacts on drinking water quality," and that "[w]hile these impacted sites are often assumed to be anomalies, mounting evidence indicates that the characteristics contributing to the documented impact (*e.g.*, magnitude of the pollutant loadings, type of pollutant present, plant operations, and wastewater handling techniques) are common among steam electric power plant receiving water locations." ELG Rule Environmental Assessment ("EA") at 3-20 (Attachment 2 (excerpts)).

Regarding the concrete environmental improvements offered from the ELG Rule, the EA explained that "pollutant loadings from existing sources will decrease by over 95 percent for copper, lead, mercury, nickel, selenium, thallium, and zinc and over 90 percent for arsenic and cadmium," which "will reduce the negative impacts on the environment as well as the potential exposure of these contaminants to ecological and human receptors." EA at 7-5. In addition, as the EA found, "[t]he selenium removals will significantly improve the water quality around the steam electric power plant discharge locations," and the "[m]ercury removals will improve human health as mercury has been linked to decreased IQs in children whose pregnant mothers have been exposed to mercury by consuming fish." EA at 7-5.

[1] As discussed below, while CWA Section 1371(c) may exempt certain EPA actions taken under the CWA from NEPA requirements, that exemption does not apply to the Delay Rule since it is not authorized by any provision of the CWA.

EPA reiterated many of these findings in issuing the Final ELG Rule in November 2015. Recognizing that these power plants discharge "vast quantities of pollutants into waters of the United States," including arsenic, mercury, selenium, chromium, and cadmium, and that these discharges "can cause severe health and environmental problems in the form of cancer and noncancer risks in humans, lowered IQ among children, and deformities and reproductive harm in fish and wildlife," EPA explained that the Final ELG Rule – which will require deployment of economically achievable measures to reduce these discharges – will annually "reduce[ ] the amount of toxic metals, nutrients, and other pollutants that steam electric power plants are allowed to discharge *by 1.4 billion pounds*." Final ELG Rule at 67,841 (emphasis added). With regard to selenium in particular, in the Final Rule EPA concluded that "[s]elenium is one of the primary pollutants documented in the literature as causing environmental impacts to fish and wildlife," and that, under the Final ELG Rule, "selenium receiving water concentrations will be reduced by two thirds [ ], leading to a reduction in the number of immediate receiving waters exceeding the freshwater chronic criteria for selenium." *Id.* at 67874.

As EPA also explained, these improvements will help address:

> both acute (e.g., fish kills) and chronic effects (e.g., reproductive failure, malformations, and metabolic, hormonal, and behavioral disorders) upon biota within the receiving water and the surrounding environment. Recovery of aquatic environments from exposure to these steam electric power plant pollutants can be extremely slow due to the accumulation and continued cycling of the pollutants within ecosystems, resulting in the potential to alter ecological processes such as population diversity and community dynamics. Furthermore, many steam electric power plants discharge pollutants to sensitive environments such as the Great Lakes, valuable estuaries such as the Chesapeake Bay, 303(d) listed impaired waters, and waters with fish consumption advisories. EPA identified 69 steam electric power plants with documented adverse environmental impacts on surface waters.

*Id.* at 67,872. In sum, EPA concluded that the Rule would provide a "significant number of environmental and ecological improvements and reduced impacts to wildlife and humans from reductions in pollutant loadings . . . ." *Id.* at 67,873; *see also id.* at 67,874.[2]

[2] Indeed, the Final ELG Rule is consistent with the approach Administrator Pruitt's EPA took in recently finalizing another Effluent Limitations Guideline rule concerning mercury discharges of from dental offices, where the agency recognized its obligation to impose technology-forcing measures to protect the environment through effluent discharge requirements. *See* 82 Fed. Reg. 27,154, 27,157 (June 14, 2017) ("The legislative history of CWA section 304(b), which is the heart of the effluent guidelines program, describes the need to press toward higher levels of control through research and development of new processes, modifications, replacement of obsolete plants and processes, and other improvements in technology.").

### B. Administrator Pruitt's Proposed Delay Rule To Roll Back The Final ELG Rule

On April 24, 2017, in purported response to requests for "reconsideration," Administrator Pruitt announced he intended to reconsider the ELG Rule. Shortly thereafter, he issued a Federal Register notice purported to "stay" the ELG Rule pursuant to the Administrative Procedure Act (APA). 82 Fed. Reg. 19005 (Apr. 25, 2017). He claimed the stay – which, under APA Section 705, can apply only while litigation against the Rule remains pending – is justified to protect industry from spending money to begin complying with the Rule during reconsideration. *Id.* Thus, although claiming that EPA is "not making any concession of error with respect to the rulemaking," Administrator Pruitt asserted the stay is appropriate to "preserve the regulatory status quo with respect to waste streams subject to the Rule's new, and more stringent, limitations and standards, while the litigation is pending and the reconsideration is underway. *Id.*

On June 6, 2017, Administrator Pruitt issued the Proposed Delay Rule to *indefinitely postpone* compliance deadlines for the ELG Rule, invoking the same rationales. 82 Fed. Reg. 26,017. Thus, he claimed the delay is needed because he is reconsidering the Final ELG Rule, and he has decided companies should not have to start working toward compliance until that reconsideration process is completed. *Id.* at 26,018. Moreover, while claiming this postponement is "temporary," the Proposed Rule specifically seeks comment on whether the Delay Rule should "be for a specified period of time, for example, two years." *Id.*

## Discussion

### A. Administrator Pruitt May Not Alter Compliance Dates For The Final ELG Rule Without First Completing A New Rulemaking To Modify Or Rescind The Rule.

As noted, Administrator Pruitt has provided two justifications for the proposal to indefinitely delay compliance deadlines on the Final ELG Rule. First, he claims the delay is in response to the petitions for reconsideration. Second, he claims the delay is necessary now because otherwise companies may begin incurring costs to comply with the Rule. Thus, while the Notice claims the agency "is not making any concession of error with respect the" Rule, the agency asserts the power to stay compliance deadlines because it *might* change the Rule, and does not want companies to begin complying until a new decision is made on reconsideration.[3]

These are not legally sufficient rationales to support the Delay Rule. EPA promulgated the Final ELG Rule after extensive public participation, and after compiling an overwhelming scientific record, supporting the reasonable improvements EPA has imposed in order to address serious public health and environmental concerns. If, after conducting a similarly rigorous process, EPA can justify modifying the Final ELG Rule, it may attempt to do so at that time. However, *given that EPA is not at this time calling into question any aspect of the Final ELG Rule*, numerous precedents establish the agency may not temporarily suspend the Rule simply because it wants to take another look.

[3] EPA certainly may not assert yet *more* bases for the Delay Rule in any final rule, without first providing an opportunity for public comment on any such rationales.

For example, in *Public Citizen v. Steed*, 733 F.2d 93 (D.C. Cir. 1984), the D.C. Circuit rejected an agency's attempt to do precisely what EPA is doing here: suspending a rule rather than attempting to justify revoking or modifying it altogether. In that case, after the National Highway Transportation Safety Administration had finalized a regulation for grading tires, it sought to suspend the regulation, claiming the testing regime was not working as intended and that industry should not bear compliance costs until the issues were resolved. *Id.* at 96-97.

Rejecting these arguments, the Court first explained that the temporary suspension of a rule has the same effect, and is reviewed under the same standard, as a revocation of the rule. *Id.* at 97-98. Thus, the agency must provide a reasoned explanation for why it has reversed course with regard to the rule. *Id.* at 98; *see also Mingo Logan Coal Co. v. EPA*, 829 F.3d 710, 732 (D.C. Cir. 2016) ("It is a fundamental principle of administrative law that federal 'administrative agencies are required to engage in reasoned decisionmaking'") (quoting *Michigan v. EPA*, 135 S. Ct. 2699, 2706 (2015)); *accord Clean Air Council v. Pruitt*, No. 17-1145, _ F.3d _, 2017 U.S. App. LEXIS 11803 (D.C. Cir. July 3, 2017)).

Next, the Court explained the agency's rationales were arbitrary and capricious because the agency had not reasonably explained why the regulation should not remain in effect while the agency reconsidered it; how the rule was not working in the manner the agency had intended; or why it had refused to consider any alternatives to completely suspending the regulation. *Steed*, 733 F.2d at 99-105.

Similarly, here, Administrator Pruitt has not remotely justified EPA's proposal to suspend the Final ELG Rule – which is the practical effect of EPA's "suspension" of compliance deadlines. He has not even tried to (a) describe *any* purported deficiencies with the Rule, (b) explain why the ELG Rule should not and cannot remain in effect during EPA's review, or (c) detail why there are no options available to the agency other than entirely suspending this vitally important Rule while the agency completes its "reconsideration." It is black letter law that the mere fact that Administrator Pruitt has decided now that he *might* in the future decide to change the Final ELF Rule is not a reasonable basis on which the suspend the Rule in the meantime. *See, e.g., Mexichem Specialty Resins, Inc. v. EPA*, 787 F.3d 544, 557 (D.C. Cir. 2015) ("If an agency could engage in rescission by concession, the doctrine requiring agencies to give reasons before they rescind rules would be a dead letter."). Moreover, Administrator Pruitt has entirely failed to consider the lost *benefits* of the Rule that inevitably will arise from delaying its implementation. *See, e.g., Sierra Club v. Jackson*, 833 F. Supp. 2d 11, 30-33 (D.D.C. 2012) (rejecting effort to delay rule's effective date where EPA failed to consider relevant factors); *Michigan v. EPA*, 135 S. Ct. 2699, 2707 (2015) ("[R]easonable regulation ordinarily requires paying attention to the advantages and the disadvantages of agency decisions.").

Accordingly, Administrator Pruitt cannot justify finalizing the Delay Rule. *See also Clean Air Council*, 2017 U.S. App. LEXIS 11803 (rejecting EPA's claim of inherent authority to stay the effectiveness of a rule pending reconsideration).

## B. Administrator Pruitt May Not Issue The Delay Rule Without First Complying With the ESA and NEPA.

Even assuming there could be some lawful basis to delay the compliance deadlines for the Final ELG Rule, the agency may not do so until it has first complied with its obligations under the ESA and NEPA.

### 1. EPA Must Obtain One Or More Biological Opinions Detailing The Impacts Of The Delay Rule On Listed Species, As Required By the Endangered Species Act

Pursuant to the ESA, before EPA may take any action – such as the Delay Rule – that may affect species listed as threatened or endangered under the ESA, or modify their critical habitat, the agency must first consult with the Fish and Wildlife Service and/or NOAA Fisheries, under ESA Section 7. 16 U.S.C. § 1536(a)(2). As discussed below, because the Final ELG Rule will *reduce* take and other adverse impacts on protected species from power plants discharges, it is evident that by *delaying* those increased protections through the Delay Rule, EPA will adversely affect such species – thereby requiring Section 7 consultation. *Id; see also id.* § 1538 (prohibiting "take" of protected species); § 1532(19) (broadly defining prohibited "take" to include actions which harass, harm, kill or wound protected species). Consequently, before EPA could finalize the Delay Rule it must obtain one or more Bi-Ops detailing those adverse effects and the measures that can be taken to lessen them, and insuring that the Delay Rule is not likely to jeopardize the continued existence of any threatened or endangered species or adversely modify any critical habitat. *Id.* at 1536(a)(2).[4]

#### a. The Adverse Impacts Of Power Plant Discharges On Listed Species

The adverse impacts of the myriad chemicals discharged by power plants on threatened and endangered species are well documented; indeed, many of those impacts are discussed in the Rule itself and accompanying documents. Thus, for example, in the EA accompanying the ELG Rule EPA discusses the effects of these discharges on species, detailing that, as a result of the pollutants discharged from these power plants, aquatic species experience "acute effects (e.g., fish kills) and chronic effects (e.g., malformations, and metabolic, hormonal, and behavioral disorders)," as well as "reduced growth and reduced survival [and] changes to the local habitat." EA at 3-20. In the EA, EPA also emphasized the particularly severe adverse environmental impacts associated with a "number of surface waters that receive discharges of the evaluated

[4] EPA must obtain one or more Bi-Ops that address the direct and indirect impacts on listed species from all the power plants covered by the Final ELG Rule, since the "action area" covered by the consultation must include "all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action." 50 C.F.R. § 402.02. The most appropriate way to comply with this obligation will be to obtain a programmatic Bi-Op, which is the approach the agency took in consulting on the impacts associated with its Cooling Water Intake Structures rulemaking. *See* Endangered Species Act Section 7 Consultation Programmatic Biological Opinion on the U.S. Environmental Protection Agency's Issuance and Implementation of the Final Regulations Section 316(b) of the Clean Water Act at 21-28 (May 19, 2014).

wastestreams and are located in close proximity to" sensitive environments such as the Great Lakes and Chesapeake Bay watersheds. *Id.* at 3-38 – 3-41.

As regards threatened and endangered species in particular, the EA identified "138 threatened and endangered species whose habitats overlap with, or are located within, surface waters that exceeded NRWQC for the protection of aquatic life under baseline conditions," EA at 7-31, and explained that, "[b]ased on evidence in the literature, damage cases, other documented impacts, and modeled receiving water pollutant concentrations, it is clear that current wastewater discharge practices at steam electric power plants are impacting the surrounding aquatic and terrestrial environments . . . .". *Id.* at 9-1. EPA also discussed the long recovery times associated with the environmental damage done by power plant discharges, explaining how "accumulation of metals and other bioacummulative pollutants in sediments can slow recovery of aquatic systems following exposure to power plant wastewater due to the potential for resuspension in the water column and for benthic organisms to provide a pathway for exposure long after power plant wastewater discharges have ended." *Id.* at 3-47.

On the positive side of the ledger, in the Final ELG Rule EPA explained that the agency "expects that once the rule is implemented the number of immediate receiving waterbodies with potential impacts to wildlife will begin to be reduced *by more than half* compared to baseline conditions . . . . ." Final ELG Rule at 67,874 (emphasis added); *see also id.* at 67,874 ("EPA estimates that this rule will reduce the number of immediate receiving waters exceeding the benchmark for minks and eagles by approximately half for mercury and selenium."); *id.* (the "risk of adverse reproductive effects among fish (e.g., reduced larvae survival) and waterfowl (e.g., reduced egg hatchability) with dietary exposure to selenium from steam electric power plant wastewater" "will be reduced by more than half."). The Final ELG Rule also explained that the new requirements "will improve aquatic and wildlife habitats in the immediate and downstream receiving waters from steam electric power plant discharges," and that "these water quality and habitat improvements will enhance efforts to protect threatened and endangered species." *Id.* at 67874. For example, EPA identified "four species with a high vulnerability to changes in water quality whose recovery will be enhanced by the pollutant reductions associated with the final rule," *id.,* and "determined that of 15 species whose recovery may be enhanced by the final rule, three fish species and one salamander species may experience changes in population growth rates as a result of the final rule." *Id.* at 67,879; *see also id.* ("The T&E species expected to benefit from the rule include one species of sturgeon and two species of minnows").

The cost-benefit analysis that accompanied the Final Rule also explained that "[f]or threatened and endangered (T&E) species vulnerable to future extinction, [because] even minor changes to reproductive rates and small levels of mortality may represent a substantial portion of annual population growth," "steam electric power plant discharges may either lengthen recovery time, or hasten the demise of these species." Cost-Ben Report at 2-7 (Attachment 3 (excerpts)); *see also id*. Section 5. Thus, EPA found the Rule would positively affect the "recovery trajectory for 15 T&E species." *Id.* 5-4.

These conclusions are well supported by the literature concerning the adverse effects associated with some of the principal pollutants the ELG Rule is designed to address:

*Selenium*

It is well-recognized that selenium bioaccumulates and causes reproductive effects at very low concentrations. Elevated levels of selenium pose a concern for species such as razorback suckers because adults readily bioaccumulate selenium in various tissues, including egg tissues. For example, fish collected in Las Vegas Wash exhibited selenium in whole body tissue ranging from 3.5-13.7 ppm, well above whole-body toxicity thresholds. [5]

Elsewhere, concentrations of 3µg/g of selenium in the food chain have been found to cause gill and organ damage in certain fish.[6] For example, studies have revealed significant exposures of endangered fish species in Colorado to selenium. In one study analyzing selenium concentrations of 26 fish specimens collected from designated critical habitat in the Gunnison River, one Colorado pikeminnow specimen exhibited concentrations in muscle plugs that exceeded the 8 micrograms per gram dry weight toxicity guideline for selenium in fish muscle tissue.[7] Several species, including the razorback sucker and Colorado pikeminnow, exhibited selenium exposures in excess of the critical concentration at which Type 1 health effects begin to occur.[8]

*Mercury*

Mercury is a potent neurotoxin shown to cause numerous reproductive and endocrine impairments in fish in laboratory experiments, including effects on production of sex hormones, gonadal development, egg production, spawning behavior, and spawning success.[9] For example, concentrations of mercury in Colorado pikeminnow are documented to be well in excess of the

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[5] *See* U.S. Fish and Wildlife Service, Biological Opinion for Systems Conveyance and Operations Program for the Discharge of Municipal Wastewater into Lake Mead, Clark County, Nevada (2007); Hamilton, S.J., *et al.*, Hazard assessment of selenium to endangered razorback suckers (*Xyrauchen texanus*), 291 *The Science of the Total Environment* 111 (2002); Hamilton, S., Review of residue-based selenium toxicity thresholds for freshwater fish, 65 *Ecotoxicology and Environmental Safety*, 201 (2003).

[6] *See* Lemly, A.D., Appalachian Center for the Economy & the Environment and Sierra Club, Aquatic hazard of selenium pollution from mountaintop removal coal mining (2009).

[7] *See* May, Thomas W. & Michael J. Walther, Determination of selenium in fish from designated critical habitat in the Gunnison River, Colorado, March through October, 2012, US Geological Survey Open-File Report 2013-1104 (2013).

[8] *Id*.

[9] *See, e.g.,* U.S. Fish and Wildlife Service, 2014-2015 Assessment of Sufficient Progress Under the Upper Colorado River Endangered Fish Recovery Program in the Upper Colorado River Basin, and of Implementation of Action Items in the December 20, 1999, 15-Mile Reach Programmatic Biological Opinion and December 4, 2009, Gunnison River Basin Programmatic Biological Opinion (2015).

thresholds for reproductive impairment and population-level impacts.[10] Indeed, in a recent notice finalizing regulations for mercury discharges from dental offices, Administrator Pruitt's EPA *itself* reiterated that, "[m]ercury is a potent neurotoxin that bioaccumulates in fish and shellfish, and mercury pollution is widespread and a global concern that originates from many diverse sources such as air deposition from municipal and industrial incinerators and combustion of fossil fuels." 82 Fed. Reg. 27,154, 27,155 (June 14, 2017).

As with other pollutants, mercury deposition and accumulation in imperiled species' habitat is attributable to a number of local and global factors, including emissions from coal-fired power plants both in the immediate region and around the world.[11] Once mercury is deposited on land or water, it is converted into a biologically available form, methylmercury (MeHg) by bacteria. Methylmercury "bioaccumulates in food chains, and particularly in aquatic food chains, meaning that organisms exposed to MeHg in their food can build up concentrations that are many times higher than ambient concentrations in the environment."[12] Once it accumulates, mercury is a potent neurotoxin, affecting fish in many ways, including brain lesions, reduced gonadal secretions, reproductive timing failures, reduced ability to feed, suppressed reproductive hormones, reduced egg production, reduced reproductive success, and transfer of mercury into developing eggs.[13] Although the precise effects vary with relative concentrations, mercury and selenium may have synergistic toxic effects at certain ratios.[14]

*Lead*

It is also well-recognized that lead causes serious harms to wildlife. Lead is a non-specific poison affecting all body systems. Birds can suffer from both acute and chronic lead poisoning[15], and

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[10] *See* Osmundson, Barb & Joel Lusk, Field assessment of mercury exposure to Colorado pikeminnow within designated critical habitat (2011); *see generally* Beckvar, N., *et al.*, Approaches for linking whole-body fish tissue residues of mercury or DDT to biological effects threshold, 24 Environmental Toxicology and Chemistry 2094-2105 (2005)/

[11] *See* Biological Opinion for the Four Corners Power Plant and Navajo Mine Energy Project, U.S. Fish and Wildlife Service, at 76 & Table 3 (April 8, 2015).

[12] *Id.* at 73.

[13] *See* Lusk, Joel D., U.S. Fish and Wildlife Service, Mercury (Hg) and Selenium (Se) in Colorado Pikeminnow and in Razorback Sucker from the San Juan River, 17 (2010).

[14] *Supra n.* 12 at 103.

[15] *See* Bellrose, F.C., Lead Poisoning as a Mortality Factor in Waterfowl Populations, 27 Ill. Nat. Hist. Surv. Bull. 2335 (1959); Redig, P. T., A report on lead toxicosis studies in bald eagles. Final Report, U. S. Fish and Wildlife Service Project No. BPO #30181-0906 (1985); Sanderson, G.C. & F.C. Bellrose, A Review of the Problem of Lead Poisoning in Waterfowl, Ill. Nat. Hist. Surv. Spec. Publ. 4 (1986); Eisler, R., Lead Hazards to Fish, Wildlife and Invertebrates: A Synoptic Review, U.S. Fish and Wildlife Service Biol. Rep. 8, 1-4 (1988); Scheuhammer, A.M.

may develop appetite loss, anemia, anorexia, reproductive or neurological impairment, immune suppression, weakness, and susceptibility to predation and starvation.[16]

Lead toxicosis depresses the activity of certain blood enzymes, such as delta aminolevulinic acid dehydratase, essential for cellular energy and hemoglobin production, and may impair immune function.[17] Over longer periods, haematocrit and hemoglobin levels are often reduced. Finkelstein *et al.* (2010) found that sub-lethal concentrations of lead in blood (20 µg/dL), resulted in a 60% decrease in the levels of aminolevulinic acid dehydratase in condors.[18] Sub-lethal toxic effects are exerted on the nervous system, kidneys and circulatory system, resulting in physiological, biochemical and behavioral changes.[19] Lead toxicosis also depresses the activity of certain blood enzymes, such as delta aminolevulinic acid dehydratase, essential for cellular energy and hemoglobin production, and may impair immune function.[20]

*Other pollutants*

Other pollutants discharged by these plants, such as arsenic and cadmium, similarly are having adverse impacts on wildlife.[21]

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& S.L. Norris, The Ecotoxicology of Lead Shot and Lead Fishing Weights, 5 Ecotoxicology 279-295 (1996).

[16] *See* Grandy, J.W. IV, *et al.*, Relative Toxicity of Lead and Five Proposed Substitute Shot Types to Pen-Reared Mallards, 32 Journal of Wildlife Management 483-488 (1968); Kimball, W. H. & Z. A. Munir, The corrosion of lead shot in a simulated waterfowl gizzard. 35(2) Journal of Wildlife Management 360-365 (1971); Finley, M.T., & M.P. Dieter, Influence of laying on lead accumulation in bone of mallard ducks. 4 Journal of Toxicology and Environmental Health,123-129 (1978); Hohman, W. L., *et al.*, "Winter survival of immature Canvasbacks in inland Louisiana," 59(2) Journal of Wildlife Management 384-392 (1995).

[17] *See* Redig, P.T., *et. al*.,. Effects of Chronic Exposure to Sublethal Concentrations of Lead Acetate on HemeSynthesis and Immune Function in Red-Tailed Hawks, 21 Arch. Environ. Contam. Toxicol. 72-77 (1991); Grasman, K.A., and P.F. Scanlon, Effects of acute lead ingestion and diet on antibody and T-cell-mediated immunity in Japanese quail., 28 Arch. Environ. Contam. Toxicol. 161–167 (1995).

[18] *See* Finkelstein, *et al.*, Feather Lead Concentrations and $^{207}Pb/^{206}Pb$ Ratios Reveal Lead Exposure History of California Condors (*Gymnogyps californianus*). 44 Environ. Sci. Technol. 2010, 2639–2647 (2010).

[19] *See* Scheuhammer, A. M., The chronic toxicity of aluminum, cadmium, mercury, and lead in birds: a review, 46 Environmental Pollution 263-295 (1987).

[20] *See* supra n. 17.

[21] *See, e.g.,* Juliane Ventura-Lima*, et al.,* "Arsenic toxicity in mammals and aquatic animals: A comparative biochemical approach," 74 Ecotoxicology and Environmental Safety,

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In short, it is evident that the power plant discharges that will be reduced by the Final ELG Rule have serious adverse impacts on wildlife, including protected species.[22]

**b. EPA's Obligation To Insure That Any Final ELG Delay Rule Is Not Likely To Jeopardize The Continued Existence Of Imperiled Species Or Adversely Modify Critical Habitat.**

As noted, the ESA requires that before EPA may take any action that may affect protected species or modify their critical habitat, the agency must first consult with the Fish and Wildlife Service and/or NOAA Fisheries, under ESA Section 7. 16 U.S.C. § 1536(a)(2). That process is completed only after EPA obtains either (a) a concurrence that the action is not likely to adversely affect the species or critical habitat, or (b) a Bi-Op that evaluates the impacts of the action on protected species. 16 U.S.C. § 1536(a)(2); *see also* 50 C.F.R. Part 402 (consultations regulations).

These consultation obligations plainly apply to the Delay Rule, for absent that Rule the environmental status quo is that within a few years steam electric power plants will be required to massively *reduce* the quantity of toxic chemicals they discharge into the environment. Accordingly, as a direct result of the Delay Rule, these plants will be causing serious environmental harms to protected species as they discharge pollutants during a period when, absent the Delay Rule, these discharges would not exist.

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Issue 3 (Mar. 2011); James R. Larison, *et al.,* Cadmium toxicity among wildlife in the Colorado Rocky Mountains, 406 Nature 181-183 (July 13, 2000).

[22] Not surprisingly, several ESA Recovery Plans are replete with references addressing the very contaminants discharged by these power plants and their adverse impacts on listed species. *See, e.g.,* Northern States Bald Eagle Recovery Plan (1983) at 8 (discussing how "mercury and lead have been implicated in eagle deaths"); Southearn States Bald Eagle Recovery Plan (1989) at 18 (same); Oyster Mussel Recovery Plan (2004) at 37 (finding that "[m]ussels appear to be among the most intolerant organisms to heavy metals," and that "cadmium is the heavy metal most toxic to mussels"); Dwarf Wedge Mussel Recovery Plan (1993) at 16 (explaining that "freshwater mussels are quite sensitive to metal pollution" and that "[a]cute toxicity tests, using juvenile mussels reared in the laboratory . . . concluded that, overall, mussels were as sensitive to metals as DaDhnia [water fleas], but more sensitive than commonly tested fish and aquatic insects"); Gulf Sturgeon Recovery Plan (1995) at 47 (discussing lead and mercury as contributors to decline of sturgeon); Southern Resident Killer Whales Recovery Plan (2008) at II-95 (explaining that the "three elements usually considered of greatest concern to cetaceans are mercury, cadmium, and lead"); Pallid Sturgeon Recovery Plan (1993) at 14 (discussing how "cadmium, mercury, and selenium have been detected at elevated concentrations in tissue of three pallid sturgeon collected from the Missouri River in North Dakota and Nebraska") (excerpts collected at Attachment 4).

For example, since EPA explained that the Final ELG Rule will *annually* reduce the quantity of "toxic metals, nutrients, and other pollutants" by "*1.4 billion pounds*," Final ELG Rule at 67,841 (emphasis added), finalizing the Delay Rule – and thus delaying implementation of the Final ELG Rule for two years (as EPA is considering) – would expose threatened and endangered species to as much as *2.8 billion additional pounds* of these discharges. Similarly, since the Final ELG Rule will reduce selenium concentrations by *two thirds*, Final ELG Rule at 67,874, delaying the Rule will expose species to massive amounts of selenium.

The fact that, as of today, these plants are not *yet* required to reduce these discharges under the ELG Rule does not impact EPA' obligation to consult on the adverse impacts of the Delay Rule. In considering the effects of an action, the ESA's implementing regulations require that an agency consider those effects in the context of the "environmental baseline," which includes "the past and present impacts of all Federal, State or private actions and other human activities in the action area . . . ." 50 C.F.R. § 402.02; *Defenders of Wildlife v. Babbitt*, 130 F. Supp. 2d 121, 127 (D.D.C. 2001). The Final ELG Rule is thus an existing action that EPA must make part of the baseline for its analysis. When compared to the proper baseline, it is absolutely clear that the Delay Rule will have serious deleterious environmental impacts. *See, e.g., Natl Wildlife Fedn v. Natl Marine Fisheries Svc.,* 524 F.3d 917, 929-931 (9th Cir. 2007) (requiring agency evaluate the impacts of proposed dam management actions in light of the most environmentally protective status quo); *Am. Rivers, Inc. v. United States Army Corps of Eng'rs.*, 421 F.3d 618 (8th Cir. 2005) (same); *see also Center for Biological Diversity v. EPA*, No. 14-1036, _ F.3d _, 2017 U.S. App. LEXIS 11668 (June 30, 2017) (finding consultation required for pesticide registration).[23] Accordingly, before EPA may finalize the Delay Rule it must obtain one or more Bi-Ops from the FWS and/or NOAA Fisheries addressing the adverse effects of the Delay Rule on ESA protected species; the specific measures EPA must take to minimize and mitigate those effects; and, ultimately, whether the Delay Rule may jeopardize the continued existence of listed species or adversely modify critical habitat. 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14.[24]

**2. EPA Must Complete An Environmental Impact Statement Concerning The Adverse Environmental Impacts From The Delay Rule.**

NEPA, our "basic national charter for protection of the environment," 40 C.F.R. § 1500.1, requires federal agencies to prepare an Environmental Impact Statement (EIS), for any major federal action that may have significant environmental impacts. 42 U.S.C. § 4332; 40 C.F.R.

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[23] Although the ELG Rule is presently stayed under the Section 705 APA Stay, that part of the status quo is irrelevant to the Delay Rule, which is being promulgated precisely because the APA Stay will expire "in the event that the litigation ends." 82 Fed. Reg. at 26,018. Thus, because the entire purpose of the Delay Rule is to prevent implementation of the ELG Rule *after the APA Stay expires*, the ELG Rule must be considered to be in effect for purposes of evaluating the adverse impacts of delaying its implementation under the Delay Rule.

[24] At minimum, EPA must initiate informal consultation and/or prepare a Biological Assessment to evaluate whether the Delay Rule may adversely affect listed species. *See* 50 C.F.R. §§ 402.12-402.13. Only if, through those processes, EPA obtains from the FWS and/or NOAA Fisheries a written concurrence that the Delay Rule is not likely to adversely affect any listed species may the agency proceed without obtaining a Bi-Op. *Id.* § 402.14(b).

§1502.9. An EIS must discuss: (i) the environmental impact of the proposed action, (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented, (iii) alternatives to the proposed action, (iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented. 42 U.S.C. § 4322. An EIS serves the statute's two key goals: (a) to ensure the agency, in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impacts, and (b) to guarantee that the relevant information will be made available to the public. *See, e.g., Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989).

In considering the effects of an action, an agency must consider all impacts on the environment, including, *inter alia*, "effects on air and water and other natural systems." *Id.* § 1508.8(b). An EIS must also consider "cumulative" effects – *i.e.*, "the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes such other actions." *Id.* § 1508.7.
While CWA Section 1371(c) exempts certain EPA actions taken under the CWA from NEPA requirements, 33 U.S.C. § 1371(c) this exemption cannot apply to the Delay Rule. To the contrary, that exemption is limited to actions "of the Administrator taken *pursuant to this Chapter [i.e., the CWA]*." 33 U.S.C. § 1371(c)(1)(emphasis added).

Here, the Delay Rule is not being promulgated under the CWA, which contains no provision authorizing the indefinite delay of a duly promulgated rule simply because a new Administrator wants to reconsider it. *Cf. NRDC v. Abraham*, 355 F.3d 179, 202 (2d Cir. 2004) (ruling EPA could not delay implementation of a rule where not specifically authorized by the governing statute). Accordingly, before Administrator Pruitt may seek to finalize the Delay Rule, the agency must also prepare an EIS detailing the myriad adverse environmental impacts associated with the Delay Rule, and considering reasonable alternatives.[25]

[25] Since there is no basis on which EPA could deem the Delay Rule Categorically Excluded from NEPA review, at minimum the agency must prepare an Environmental Assessment; the agency may proceed without a full-blown EIS only if it can issue a lawful "Finding of No Significant Impact" demonstrating that the Delay Rule will not have significant environmental impacts requiring an EIS. *See* 50 C.F.R. Part 1500 (CEQ NEPA implementing regulations). However, given that the entire purpose of the ELG Rule is to address serious environmental harms caused by these power plants, it could not be more clear that EPA may not proceed with the Delay Rule without first preparing an EIS.

## Conclusion

For the foregoing reasons, the Center urges Administrator Pruitt to abandon the Delay Rule and to allow the Final ELG Rule to remain in effect while he considers whether he will seek to modify the Rule in any respect. Any such modification, moreover, would have to be done through notice and comment rulemaking and be based on a thorough record demonstrating why the Final ELG Rule is no longer the appropriate approach to carry out EPA's obligations under the CWA. As have explained, putting the Final ELG Rule on hold while proceeding with that process is flatly illegal.

Even if EPA could lawfully put the Final ELG Rule on hold during the reconsideration process, the agency could not do so without first consulting with the FWS and/or NOAA Fisheries under the ESA and completing an EIS under NEPA. Only by fulfilling these vital environmental review obligations can the agency fulfill its responsibility to consider the seriously deleterious environmental effects that will flow from putting the Delay Rule in place, and thereby allowing our Nation's waterways, wildlife, and imperiled species to be subjected to the massive pollution that will be avoided through the Final ELG Rule.

Thank you for your consideration.

Sincerely,

Howard M. Crystal
Senior Attorney

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